

Claims

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1.- Heat exchanger which mainly consists of a housing with a bottom, an upper wall and side walls, whereby onto two pairs of opposite side walls, the front wall and the back wall respectively, are connected a supply and a discharge for the gas to be cooled, and whereby channels are provided in the housing, according to two cross directions, characterised in that, between the above-mentioned channels (14-15) and the above-mentioned back wall (6), means are provided for separating condensate from the cooled gas.

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2.- Heat exchanger according to claim 1, characterised in that the separated condensate is discharged via holes (22) in the bottom (3) of the heat exchanger (1).

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3.- Heat exchanger according to claim 1, characterised in that the above-mentioned means for separating condensate from the cooled gas are mainly formed of a series of corrugated vertical walls (17), upon which are provided crosswise extending ribs (19) extending from the bottom (3) up to the upper wall (8) of the housing (2), and whereby on the side of the above-mentioned ribs (19), directed away from the back wall (6), the above-mentioned holes (22) are provided in the bottom (3) of the housing (2).

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4.- Heat exchanger according to claim 3, characterised in that the above-mentioned ribs (19) are folded back at

their free ends to the front wall (4) of the housing (2).

5.- Heat exchanger according to claim 4, characterised in
that each of the above-mentioned ribs (19) are provided on
5 the outside of a U-shaped bent part (18) of the above-
mentioned corrugated walls (17).

6.- Heat exchanger according to claim 2, characterised in
that below the bottom (3) of the housing (2) is
provided a collector (28) for condensate, onto which is
10 connected a discharge pipe (30).

7.- Heat exchanger according to claim 6, characterised in
that the above-mentioned collector (28) is made U-shaped.

8.- Heat exchanger according to claim 2, characterised in
that between the means for separating condensate from the
15 cooled gas and the above-mentioned back wall (6) is
provided an opening (23) in the bottom (3) of the housing
(2), which opening (23) extends over the entire, or
practically the entire width of the housing (2).

9.- Heat exchanger according to claims 7 and 8,
20 characterised in that the leg (31) of the collector (28)
which is situated closest to the back wall (6), is
connected to the side edge (24) of the above-mentioned
opening (23) on the side of the back wall (6).

10.- Heat exchanger according to claim 8, characterised in
25 that on the above-mentioned side edge (24) of the opening

(23) is provided a standing rib (25).

11.- Heat exchanger according to claim 10,
characterised in that the above-mentioned standing rib
(25) is provided with a cross edge (26) on its free end
5 which extends over practically the entire opening (23).

12.- Heat exchanger according to claim 11,
characterised in that the above-mentioned cross edge
(26), near the side walls (5-7) of the housing (2), is
made shorter than around the centre of the housing (2).

10 13.- Heat exchanger according to claim 8, characterised in
that between the means for separating condensate from the
cooled gas and the above-mentioned opening (23), below
the bottom (3) of the housing (2), is provided a
crosswise extending edge (27).